(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 5 February 2004 (05.02.2004)

(10) International Publication Number WO 2004/011656 A1

(51) International Patent Classification⁷: A01H 5/00

France [CA/CA]; 1309 avenue de la Ronde, Québec, Québec G1J 4C1 (CA).

(21) International Application Number:

PCT/CA2003/001141

C12N 15/82,

28 July 2003 (28.07.2003) (22) International Filing Date:

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/398,779

29 July 2002 (29.07.2002)

(71) Applicant (for all designated States except US): UNI-VERSITÉ LAVAL [CA/CA]; Cité universitaire, Québec, Québec G1K 7P4 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MICHAUD, Dominique [CA/CA]; 965 avenue Bégin, Québec, Québec G1S 3J3 (CA). RIVARD, Daniel [CA/CA]; 3686 rue Pélissier, apt. 23, Sainte-Foy, Québec G1X 3W8 (CA). ANGUENOT, Raphaël [CA/CA]; 3065 rue Lemieux, Québec, Québec G1P 4N6 (CA). TRÉPANIER, Sonia [CA/CA]; 314 rue de la Seine, Saint-Nicolas, Québec G7A 2P8 (CA). VÉZINA, Louis-Philippe [CA/CA]; 206 route 138. Neuville, Québec GOA 2RO (CA). BRUNELLE, (74) Agent: OGILVY RENAULT; Suite 1600, 1981 McGill

College Avenue, Montréal, Québec H3A 2Y3 (CA).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,

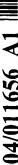
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(54) Title: METHOD FOR ENHANCING YIELD OF RECOMBINANT PROTEIN PRODUCTION FROM PLANTS

(57) Abstract: The present invention relates to a method for enhancing the yield of recombinant protein produced in genetically transformed plants. The invention most particularly relates to a method for preventing the undesirable proteolysis of recombinant proteins after harvest of the plant, during processing of the products from the plants. Especially, this invention focuses on introducing protease inhibitors in plants to prevent undesirable proteolysis of recombinant proteins at the time of cell disruption during the extraction process.